UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/833,654	04/13/2001	Kenneth E. Gillespie	3782-3	1749

7590   07/14/2004

NIXON & VANDERHYE P.C.
1100 North Glebe Road, 8th Floor
Arlington, VA 22201-4714

EXAMINER
NGUYEN, NGA B

ART UNIT	PAPER NUMBER
3628	

DATE MAILED: 07/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

    A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *13 April 2001*.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-21* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-21* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some *   c) ☐ None of:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date *8/30/01*.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

DETAILED ACTION

1.   This Office Action is the answer to the communication filed on April 13, 2001,

which paper has been placed of record in the file.

2.   Claims 1-21 are pending in this application.

Claim Rejections - 35 USC § 101

3.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4.   Claims 1-15 are rejected under 35 U.S.C 101 because the claimed invention is

directed to non-statutory subject matter, particularly, an abstract idea.

The claims, as presently claimed and best understood were reconsidered in light

of the "Examination Guidelines for Computer-Related Inventions" and were found to be

non-statutory. Discussion of the analysis of the claims under the guidelines follows.

Claims 1-15 merely manipulate an abstract idea that is not within the

technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural

phenomena) that do not apply, involve, use, or advance the technological arts fail to

promote the "progress of science and the useful arts" (i.e., the physical sciences as

opposed to social sciences, for example) and therefore are found to be non-statutory

subject matter.

As to claims 1-15, the invention is not implemented on a specific apparatus;

therefore, the invention is not directed to the technological arts. To be statutory, the

utility of an invention must be within the technological arts.   The definition of

"technology" is the "application of science and engineering to the development of

machines and procedures in order to enhance or improve human conditions, or at least

to improve human efficiency in some respect." (Computer Dictionary 384 (Microsoft

Press, 2d ed. 1994)). When one looks to the present specification to determine what

the applicant has invented, the invention appears to be a series of steps performed on a

computer. It is clear that claims 1-15 are intended to be directed to the abstract method

apart from the apparatus for performing the method. Therefore, claims 1-15 are non-

statutory, because they are directed solely to an abstract idea without practical

application in the technological arts.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6.   Claim 4 is rejected under 35 U.S.C. 102(b) as being anticipated by Egendorf, U.S.

Patent No. 5,794,221.

Regarding to claim 4, Egendorf discloses a method of making charges for goods

and/or services against the account of a payment card having an associated account

number, including paying a provider of goods and/or services (column 5, lines 1-10; column 6, lines 13-36), without supplying the account number to the provider of said goods and services (column 5, lines 39-42).

7.   Claim 5 is rejected under 35 U.S.C. 102(b) as being anticipated by Colvin, Sr. (hereinafter Colvin), U.S. Patent No. 5,825,881.

Regarding to claim 5, Colvin discloses a method of providing transactions while providing uniqueness for each transaction, including relying on transactional identifying system generated by combining providers' identification numbers with their internal invoice numbers for each transaction (column 5, lines 37-48 and column 6, lines 52-58; combining the merchant's account number with the purchaser order number for each transaction).

8.   Claims 1-3, 6-12, 14-17, 19, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Kuo, U.S. Patent Application Publication No. 2003/0120615.

Regarding to claim 1, Kuo discloses a method of performing a financial transaction involving at least: (a) a provider of goods or services, (b) a purchaser of said goods or services, and (c) at least one further entity (figure 1, paragraph [0054], Merchant 2b, Consumer 1b, Host 3), the purchaser using a credit card having a credit card identifier associated therewith to effect a purchase of said goods or services (paragraph [0014], the consumer using payment card having a card number associated therewith), the method including:

performing at least one transaction between the provider and the purchaser (paragraph [0058], consumer 1b initiates the online transaction by sending an order to a merchant 2b);

associating at least one identifier different from the credit card identifier with said transaction (paragraph [0059], merchant 2b generates an orderID, not card number, with the transaction; [0016]-[0018], consumer does not need to submit card number in this online transaction process);

communicating the transaction identifier but not the credit card identifier from the purchaser to the further entity over the Internet (paragraph [0060], consumer sends a payment authorization request 6a includes the orderID to the Host 3);

associating the transaction identifier to the purchaser's credit card identifier (paragraph [0065], Host 3 associates the orderID with the card number),

whereby the credit card issuer charges the purchaser's credit card based at least in part on the associated credit card identifier (paragraph [0065], the credit card issuer charges the consumer's payment card based on the card number).

Regarding to claim 2, Kuo discloses including transmitting the purchaser's credit card identifier over a private connection (paragraphs [0065], [0070], [0008], the Host 3 sends card number to the card issuer over Internet Payment Gateway or payment clearing network, which is a private payment network).

Regarding to claim 3, Kuo discloses wherein the communicating step includes transmitting pieces of information at different times to different locations (paragraphs [0060], merchant sends the order accepted response message 5a to the consumer, the

consumer sends the payment authorization request 6a to the Host 3; [0061], merchant

sends the payment approval request 7 to the Host).

Regarding to claim 6, Kuo discloses a method of conducting payment

transactions between consumer and merchant comprising:

generating a transaction identifier associated with and identifying a

transaction between the consumer and the merchant (paragraph [0059], merchant 2b

generates an orderID, not card number, with the transaction);

communicating said transaction identifier in lieu of the consumer's credit

card account identifier (paragraph [0060], consumer sends a payment authorization

request 6a includes the orderID to the Host 3; [0016]-[0018], consumer does not need

to submit card number in this online transaction process);

authenticating said communicated transaction identifier and those who

transmit it (paragraph [0065], the Host use the key pair, authorization code and

authentication code included in the payment authorization request 6a transmitted by the

consumer to locate the consumer payment card data);

associating the transaction identifier with the consumer's credit card account

(paragraph [0065], Host 3 associates the orderID with the card number); and

effecting payment from the consumer to the merchant through use of said

consumer's credit card account (paragraph [0070], the payment card issuer effects

payment from the consumer to the merchant through the use of consumer's payment

card account).

Regarding to claim 7, Kuo discloses wherein the consumer communicates the

transaction identifier (paragraph [0060], consumer sends a payment authorization request 6a includes the orderID to the Host 3).

Regarding to claim 8, Kuo discloses wherein said merchant generates said transaction identifier and communicates it to a third party transaction facilitator.

Regarding to claim 9, Kuo discloses wherein said third party transaction facilitator comprises a clearinghouse (paragraph [0070], payment card clearing network).

Regarding to claim 10, Kuo discloses wherein said third party transaction facilitator comprises the issuer of said consumer's credit card account (paragraph [0070], the consumer's payment card issuer).

Regarding to claim 11, Kuo discloses wherein said communicating step comprises communicating said transaction identifier over the Internet (paragraph [0056]).

Regarding to claim 12, Kuo discloses wherein said authenticating step is based on a consumer passcode (paragraph [0055], the key pair, authentication code and authentication code are established by the payment card owner consumer with the Host).

Regarding to claim 14, Kuo discloses wherein said associating step is performed based on a database lookup (paragraph [0063]).

Regarding to claim 15, Kuo discloses the method further including the steps of:

combining the transaction identifier and consumer's personal identifier (paragraph [0060], the payment authorization request 6a includes the orderID, the consumer's payment authorization code and consumer's authentication code);

subjecting the combined transaction identifier and consumer's personal identifier

to an undisclosed mathematical procedure (paragraph [0014], all messages sending

and passing over the Internet are SSL channel encrypted, thus the payment

authorization request 6a is encrypted); and

transmitting the result of said procedure, wherein the authenticating step is based

at least in part on the transmitted result (paragraph [0014], all messages received are

decrypted by recipients).

Regarding to claim 16, Kuo discloses a system for conducting secure payment

transactions between consumer and merchant comprising:

equipment at the merchant that generates a transaction identifier associated

with and identifying a transaction between the consumer and the merchant and

communicates said transaction identifier to a transaction facilitator in lieu of the

consumer's credit card account identifier (paragraph [0059], the Merchant server 2a

generates an orderID included in the transaction; [0061], the Merchant Server transmit

the payment approval request 7 includes the orderID to the Host 3; [0018], merchant

does not handle consumer's card number in this online transaction process);

equipment at the transaction facilitator that authenticates said communicated

transaction identifier and associates the transaction identifier with the consumer's

credit card account (paragraphs [0055] and [0065], Host 3 containing computer servers

that authenticates the orderID and associates the orderID with the consumer's payment

card account); and

payment fulfillment equipment that effects payment from the consumer to the

merchant through use of said consumer's credit card account (paragraph [0070],

Internet Payment Gateway or payment card clearing network).

Regarding to claim 17, Kuo discloses wherein said merchant uses a web server to

generate said transaction identifier and communicate it to the transaction facilitator

(paragraph [0059], the Merchant server 2a).

Regarding to claim 19, Kuo discloses wherein said merchant uses an electronic

cash register to generate said transaction identifier (paragraph [0059], the Merchant

server 2a, which is equivalent to an electronic cash register, generates an orderID

included in the transaction).

Regarding to claim 20, Kuo discloses wherein said transaction facilitator includes

a secure database that maps transaction identifiers and consumer passcodes into credit

card account authorizations (paragraphs [0055] and [0065]).

Claim Rejections - 35 USC § 103

9.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

10.   Claims 13, 18, and 21 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Kuo, U.S. Patent Application Publication No. 2003/0120615.

Regarding to claims 13, 21, Kuo does not disclose wherein said authenticating step is based on a digital signature and certificates. However, authenticating step is based on a digital signature and certificate is well known in the art. A digital signature is an electronic signature that can be used to authenticate the identity of the sender of a message or the signer of a document, and possibly to ensure that the original content of the message or document that has been sent is unchanged. A digital certificate is an electronic "credit card" that establishes your credentials when doing business or other transactions on the Web. It is issued by a certification authority (CA). It contains your name, a serial number, expiration dates, a copy of the certificate holder's public key (used for encrypting messages and digital signature), and the digital signature of the certificate-issuing authority so that a recipient can verify that the certificate is real. Today, many electronic commerce entities authenticate the consumers based on the digital signature and certificate in order to ensure the security in the electronic transaction. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Kuo's to include the feature above for the purpose of improving the security in the electronic transaction.

Regarding to claim 18, Kuo discloses wherein said transaction facilitator includes a web server (paragraph [0055], Host 3 containing computer servers). Kuo does not disclose a firewall and an offline computer coupled to the web server through the firewall. However, an offline computer coupled to the web server through the firewall is well known in the art. Firewall is a system designed to prevent unauthorized access to or from a private network. Firewalls can be implemented in both

hardware and software, or a combination of both. Firewalls are frequently used to prevent unauthorized Internet users from accessing private networks connected to the Internet, especially *intranets*. All messages entering or leaving the intranet pass through the firewall, which examines each message and blocks those that do not meet the specified security criteria. Today, most of electronic commerce entity's having a web server connected to one or more offline computers (private network) through the firewall in order to prevent unauthorized Internet users from accessing their private networks. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Kuo's to include the feature above for the purpose of improving the security in the Internet environment.

Conclusion

11.   Claims 1-21 are rejected.

12.   The prior arts made of record and not relied upon is considered pertinent to applicant's disclosure:

Foster (US 6,332,134) discloses a system for conducting financial transactions over the Internet without transmitting cardholder's credit card number across the Internet.

Linehan (US 6,327,578) discloses a method and system for electronic commerce.

13.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Nga B. Nguyen whose telephone number is

(703) 306-2901. The examiner can normally be reached on Monday-Thursday from 9:00AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S. Sough can be reached on (703) 308-0505.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 306-1113.

14.	Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

C/o Technology Center 3600
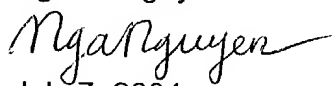
Washington, DC 20231

Or faxed to:

(703) 872-9326 (for formal communication intended for entry),

or

(703) 308-3691 (for informal or draft communication, please label "PROPOSED" or "DRAFT").

Hand-delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive, Arlington, VA, Seventh Floor (Receptionist).

Nga B. Nguyen

July 7, 2004